Jesus Mancilla

Staff User Researcher | Quant & Mixed-Methods

Decision-driving insights at scale: survey & log analytics, ML-assisted research ops, standardized evaluation

+1 650 391 4301 | jesus@jgmancilla.com | LinkedIn.com/in/jegama | GitHub.com/jegama | jgmancilla.com

Professional Summary

Staff-level UXR leader blending **quantitative research at scale** with **ML/LLM tooling** to accelerate product decisions. Shipped reusable analysis pipelines, standardized metrics, and research ops that shortened feedback loops across **500M+ MAU** and **70M+ devices**. Noted for turning ambiguity into **operational, defensible insight systems** (e.g., open-ended survey analysis **30h** → **<8h**; auto-reporting **4h** → **<5m**; doc classification **90m** → **<5m**). Bilingual (English/Spanish); strong cross-functional influence and executive-facing synthesis.

Technical Stack & Domains

Quant UX Research: Survey design & analytics, longitudinal tracking, KPI frameworks, experimentation, large-scale log analysis, dashboards
Mixed-Methods: Study design (interviews, diaries, ethnography, usability lab/remote/field), triangulation, research ops
ML/LLMs: Text classification, embeddings/vector search, clustering, RAG, prompting, evaluation/observability, HIL pipelines
Tooling: Python, SQL, statistical testing (t-tests/ANOVA/regression), FastAPI, LangChain/LangGraph, CI/CD, Docker
Domains & Scale: Social/consumer media (500M+ MAU), TV/streaming (~70M devices), commerce, education, automotive/HF

Work Experience

Argomai — Houston, TX (Remote)
Senior Applied Scientist / Senior UXR Consultant — Jan 2025 – Present
- Owned enterprise **GenAI/ML architecture** (domain models, service boundaries, governance) for insight workflows.
- Built **retrieval pipelines** and a reusable **AI component library** (embeddings, prompt templates, orchestration SDK).
- **Reduced document classification** from **90m** → **<5m** and PM reporting from **6h/wk** → **<1h** via automation.
- Led generative/evaluative interviews (screeners, protocols, synthesis) to validate value prop and de-risk roadmap.

Meta — Remote
Senior Quantitative UX Researcher — Jan 2024 – Jan 2025
- Deployed **hybrid ML + HIL classifier** for open-ended surveys; **cycle time** **30h** → **<8h** and **2× throughput**.
- Triangulated **editor logs + surveys** to inform roadmap for a **500M+ MAU** product; shipped reusable Python analytics toolkit.
- Conducted longitudinal research with bi-weekly surveys; defined critical metrics for a 500M+ MAU product.
- Standardized metrics & reporting cadence; improved cross-team adoption of quant methods and dashboards.

Roku — San Jose, CA
Senior User Experience Researcher — Jan 2021 – Nov 2023
- Built an **AI-powered research index** for UX/CI; **weekly report generation** **4h** → **<5m** (ML + LLM summaries).
- Led quant/qual device research; integrated logs across ~**70M devices** with lab findings to guide launches.
- Developed a **modular survey analysis system** (stats + NLP clustering) enabling at-scale survey analytics.
- Mentored junior researchers in survey design and behavioral data analysis; managed vendors, resource planning, and budget alignment.

Walmart Global Tech — Sunnyvale, CA
Senior User Experience Researcher — Aug 2019 – Nov 2020
- Established KPIs and analytics for Sam's Club mobile; merged **user-interaction + business metrics** to inform UX bets.
- Led cross-border (US/MX) standardization of surveys & research workflows; mentored teams in quant best practices.

Scrapworks Inc. — Palo Alto, CA
Data Scientist — Sep 2017 – Aug 2019
- **60% reduction** in forecasting error; built dashboards over 20 years of sales data (~**30% sales growth**).
- Initiated NLP merchandise classifier; productionized ingestion/cleaning pipelines across sources.

Suggestic — Mexico City, Mexico
User Experience Researcher — Dec 2016 – Sep 2017
- Data-driven UX iterations and advanced prototyping for health features; informed go/no-go decisions.
- Led transition from conversational to graphical interface using data insights; improved engagement and functionality.

Stanford University — Stanford, CA
User Experience Researcher — May 2016 – Nov 2016
- Designed on-road driver-stress protocol; ~**90%** elicitation, ~**89%** alignment with road events; published methods.
- Analyzed multi-modal data (vehicle, biometric, video); contributed to reproducible study assets.

ITAM — Mexico City, Mexico
User Experience Researcher — Aug 2014 – May 2016
- Psychophysiology + ML for stress/health; wearables & usability research; Google Glass micro-interactions (IEEE).

Selected Projects (Research Systems & At-Scale Insight)

Quant UX at Scale: Hybrid classifier + validation; **30h** → **<8h**, **2×** **throughput** in **500M+ MAU** context.

Research Librarian (AI Index): Multi-engine semantic retrieval to surface prior insights and drive reuse.

Modular Survey Analysis System: Auto-reports (stats + NLP clustering) for diverse surveys; large time savings.

Customer Support Bot (Blueprint): RAG + evaluation/observability + safety rails; solution-spotlight answers.

Education

Instituto Tecnológico Autónomo de México (ITAM)
M.S. in Computer Science (HCI/AI Focus) 2014 – 2016

Universidad de Colima
B.A. in Psychology 2009 – 2013

Selected Publications

Ramos-Rivera, R. E., Santana Mancilla, P. C., Garcia-Mancilla, J., & Gaytán-Lugo, L. S. (2025). Language models in education: Generative AI to optimize teacher performance analysis. InnovAcademica, 1(2), 74–85.

Ramos-Rivera, R. E., Garcia-Mancilla, J., Cárdenas-Villa, G. E., & Santana-Mancilla, P. C. (2024). Towards Improving Teacher Performance Assessment through Human-Centered AI-Powered Survey Analysis: An Approach Using Large Language Models (LLM). Avances en Interacción Humano-Computadora, 9(1), 261-264.

Baltodano, Sonia, Jesus Garcia-Mancilla, and Wendy Ju. "Eliciting Driver Stress Using Naturalistic Driving Scenarios on Real Roads." In Proceedings of the 10th International Conference on Automotive User Interfaces and Interactive Vehicular Applications, pp. 298-309. ACM, 2018.

Currano, Rebecca, So Yeon Park, Lawrence Domingo, Jesus Garcia-Mancilla, Pedro C. Santana-Mancilla, Victor M. Gonzalez, and Wendy Ju. "¡Vamos!: Observations of Pedestrian Interactions with Driverless Cars in Mexico." In Proceedings of the 10th International Conference on Automotive User Interfaces and Interactive Vehicular Applications, pp. 210-220. ACM, 2018.

J. Garcia-Mancilla, J. E. Ramirez-Marquez, C. Lipizzi, G. T. Vesonder, and V. M. Gonzalez, "Characterizing negative sentiments in at-risk populations via crowd computing: a computational social science approach," International Journal of Data Science and Analytics, Jun. 2018.

For full list, see: jgmancilla.com/research-papers